

DECEMBER
1953

THERE'S A PHILIPS VALVE FOR EVERY SOCKET

Amateur Radio

JOURNAL OF
THE WIRELESS
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For the Experimenter
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1/-

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EDITORIAL



LOOKING BACK

December being the twelfth and last month of the year is usually a period of great activity and festivity.

December is also usually recognised as a suitable time for "looking back" over the activities, achievements and disappointments of the year.

Looking back upon the year's activities in Hamdom, we are pleased to note the increasing interest in field work and the R.D. Contest. We record the success of the Coronation Relay.

Amongst our achievements we count the privilege of sixteen-year-olds to sit for the A.O.C.P. examination and the technically minded to sit for Limited A.O.C.P. examination; however we must record amongst our disappointments the tardiness of officialdom in completing

the machinery necessary to give full effect to these achievements.

Probably our greatest disappointment is our failure to disassociate, in the official mind, the vexatious problem presented by Commercial "Telecasting" from the humble but nevertheless worthwhile contribution to technical progress which could be achieved by the Amateur Experimenter.

Having looked back and recorded our successes and our failures, 'tis time to put away our cares and join in the festivities knowing full well that what has not been achieved in 1953 must be attempted with greater determination in 1954.

So till then fellow Hams, a Merry Christmas and a happy respite from your labours.

FEDERAL EXECUTIVE

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The S/N-6 Cascode 2 Metre Pre-Amplifier.

THE S/N-6 Cascode 2 Metre Pre-Amplifier is entirely self contained (except power supply) in a 3" x 4" x 5" metal box. All parts mount directly on the rear of the front panel so that construction is easy and straightforward. The 6BK7 and 6AK5 r.f. tubes are mounted horizontally on the front panel. Co-axial fittings are used for the r.f. input and output connections. All tuning adjustments of the coils are made from the front of the panel.

The plate voltage required for the two tubes is low—150 volts d.c.—and can be taken off the communications receiver. Filament voltage required is 6.3 volts a.c. or d.c. at 0.625 amperes.

DESIGN CONSIDERATIONS

Many 2 metre converters and receivers, today, lack two important features which are necessary for DX work at this frequency. These two features are (1) high signal-to-noise ratio (low noise figure); (2) gain. Of these two, high signal-to-noise ratio is the most important. An amplifier could increase the signal-to-noise ratio nothing would be achieved—that is, you would notice an increase in signal level, but at the same time the noise level would be increased proportionally.

The opposite case would be an amplifier with a high signal-to-noise ratio with no increase in gain. This would be a decided advantage over the first amplifier in that the signal would appear louder to the ear, however, the S meter would show no increase in signal level. These two amplifiers are exaggerated cases, since fortunately practically all r.f. amplifiers improve the signal-to-noise ratio to a certain extent and give an increase in gain.

In the design of the S/N-6, the above two features were deemed to be of utmost importance. Since the first stage of any r.f. amplifier, receiver, or converter is the most important from a signal-to-noise ratio standpoint, it was given careful design consideration. The cascode circuit was chosen because if properly designed it will produce a high signal-to-noise ratio. A pentode could be used in this circuit for high gain, however, it would produce more noise because of the current division at the screen grid. Therefore, the low-noise twin triode type 6BK7, particularly designed for cascode circuits, was chosen.

The selection of a triode was not too difficult. At first a pentode connected 6AK5 feeding a pentode connected 6AK5 in a cascode circuit was calculated for signal-to-noise ratio. Under optimum conditions this calculated to be approximately 9 db (noise figure) which was good but still too high. Then a type 6BK7 cascode feeding another 6BK7 cascode was calculated and the over-all signal-to-noise ratio was approximately 5 db (noise figure). This was considered to be very good so the original design was started.

After the circuit was designed on paper a laboratory model was constructed. This model had a tendency to break into

Many Amateurs will remember the popular "B3-er" pre-amplifier, of a few years back, well here is a recently developed version for 2 metres, which will help to drag in those weak 2 metre DX stations. The 6BK7 twin triode is difficult to obtain, but it should be possible to use types available in Australia with some sacrifice in performance. Later on, the 6BK7 may be available and could then be substituted.

One word of caution—the circuit constants and layout must be followed faithfully.

Fig. 2 was considered the best and simplest for construction.

Another feature considered and incorporated was to make the front end broadband. This is very desirable for this band, since it eliminates the necessity for retuning when going from one end of the 2 metre band to the other. Also the output impedance was made adjustable so that proper match could be made to the receiver. This is important since any mismatch to the receiver may tend to decrease the signal-to-noise ratio.

CIRCUIT DETAILS

Refer to the schematic circuit diagram shown in Fig. 1. The cascode section of the unit, which consists of both triode sections of the 6BK7, is of the parallel d.c. type. This type of circuit has the advantage over the series type circuit, in that a lower plate supply voltage is required and the heater-cathode voltage is lower.

The input circuit has been designed to accommodate either a 70 ohm or 300 ohm unbalanced line. For 70 ohm input, jack J1 is connected as shown. For 300 ohm input, the centre pin of J1 is connected to the junction of C1 and L1 as indicated by the dotted lines. Capacitors C1 and C2 and inductance L1 together with the attached antenna form a broadband input network to cover the entire two metre band. Once L1 is adjusted for the centre of the band no further adjustments are necessary.

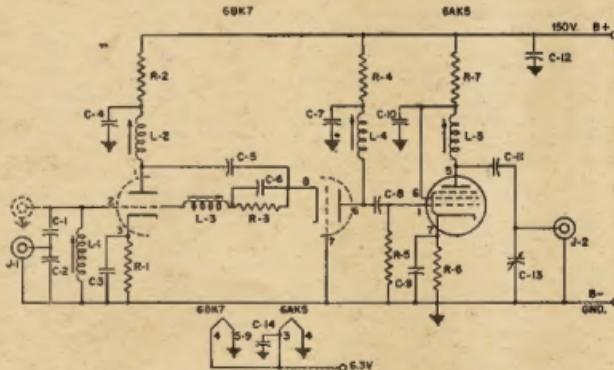


Fig. 1.—Circuit diagram of the S/N-6 Pre-Amplifier.

C1 C2—15 pF, zero temperature, tubular ceramic.
C3, C4, C5, C6, C7, C8, C12—1,000 pF, high-K tubular ceramic.

C9, C10, C14—1,000 pF, high-K disc ceramic.
C11—25 pF, zero temperature tubular ceramic.

C13—12-120 pF, mica compression padder.

R1, R3—56 ohms, 1/2 watt.

R2, R4—220 ohms, 1 watt.

R5—2,400 ohms, 1/2 watt.

R6—180 ohms, 1/2 watt.

R7—2,700 ohms, 1 watt.

L1, L2, L4—Three turns No. 24 enamel wire, spaced diameter of wire, on $\frac{1}{4}$ inch diam. former.

L3—Six turns No. 24 enamel wire, spaced diameter of wire, on $\frac{1}{4}$ inch diam. former.

L5—Two turns No. 24 enamel wire, spaced diameter of wire, on $\frac{1}{4}$ inch diam. former.

J1, J2—co-ax jacks.

6BK7 socket—9-pin miniature.

6AK5 socket—7-pin miniature.

Note—All resistors and capacitors $\pm 20\%$ tolerance unless specified otherwise.

The plate circuit of the first triode section of the 6BK7 consists of L2, C2, C5 and R2. Capacitor C4 and Resistor R2 form a decoupling network for the supply voltage. The inductance L2 is of primary importance in that it has a decided bearing on the signal-to-noise ratio. If it is replaced by an r.f. choke, the signal-to-noise ratio may be very low. Inductance L2 tunes fairly broad, but it should be adjusted for the centre of the band by spreading the coil.

Capacitor C5 feeds the signal into the cathode of the second triode section of the 6BK7. Part of this signal is fed through L3, the neutralising inductance, which forms a parallel resonant circuit with the grid-to-plate capacitance of the first triode section. This effectively tunes out the grid-to-plate capacitance which is necessary for high signal-to-noise ratio and good stability.

The second triode section of the 6BK7 is operated as a grounded grid stage. Bias voltage for this section is obtained by the cathode current flowing through R3. Capacitor C6 effectively by-passes the r.f. around this bias resistor. The plate circuit of this section incorporates another decoupling network R4 and C7. It is also tuned to resonance at the centre of the band by coil adjustment.

The final stage consists of a type 6AK5 operating as a pentode. The input to this stage is conventional. The plate circuit utilises another decoupling network formed by resistor R7 and capacitor C10. Incorporated, also, is an impedance matching network formed by inductance L5, capacitors C11 and C13. Inductance L5 is adjusted to resonance at the centre of the band, then with the receiver connected to J2, variable capacitor C13 is adjusted for the loudest signal.

Capacitors C1, C2, C11 and C13 should be of the value and type specified. The other condensers specified can either be of the tubular type or disc type. It is highly recommended the tubular type be used, with the exception of those used in bypassing the 6AK5 to facilitate short and direct connections.

CONSTRUCTION DETAILS

It is recommended that the mechanical layout shown in Fig. 2 be followed faithfully. This layout was found to be the best from an electrical and mechanical standpoint.

The S/N-6 is constructed on a 3" x 4" x 5" box with removable front and back panels. All of the components are mounted on the back of the front panel. Before mounting the components, all of the black crackle paint should be removed. This is very important to insure good ground connections. Also the lip of the box, to which the front panel attaches, should be cleaned of all paint to further insure a good ground connection.

Dimensions are given in Fig. 2 for locating the various holes. No dimensions are given for the socket holes or input and output jacks. These will depend on the type of the builder uses.

As will be noted, coils L1, L2 and L3 are in line with the input jack J1 and are mounted close to the socket. Coil

L4 is mounted above and to the right of the 6BK7 socket with coil L5 mounted to the right of the 6AK5 socket. If the dimensions outlined in Fig. 2 are followed, the coils will mount close to the sockets permitting short and direct connections. In winding the coils, leave approximately one inch of wire at the ends for soldering.

The power plug can either be mounted on the side of the box or on the rear panel. This is left up to the discretion of the builder as its location is not critical.

WIRING DETAILS

In wiring the S/N-6, the work will be much easier if a small-tip soldering iron is used. The capacitors and resistors are compactly grouped around the socket which makes the soldering operation a little difficult if a large-tip iron is used.

The 6AK5 socket is wired in the conventional manner using short direct connections. Soldering lugs placed at the socket mounting holes are used as ground tie-points.

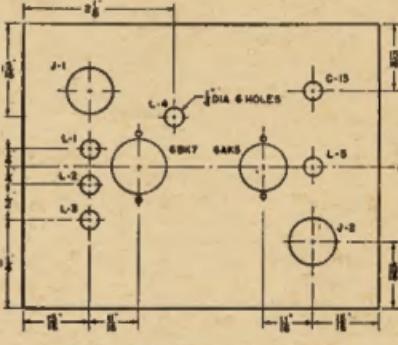


Fig. 2.—Panel layout of the S/N-6 Pre-Amplifier (back elevation).

ALIGNMENT

The alignment procedure is straightforward and simple to perform. The output of the pre-amplifier should be connected to the antenna terminals of the receiver by a short piece of cable. The cable should not be over twelve inches long and must be shielded to avoid picking up extraneous signals.

With the receiver tuned to 146 megacycles, a signal of this frequency should be fed into the antenna input (either 70 ohm or 300 ohm input). This signal can be obtained from a signal generator, transmitter, or a fairly loud signal from another Amateur station can be used. If the last two methods are used, the signal should be close to the centre of the band.

With the signal fed into the input, capacitor C13 and inductance L5 should be adjusted for maximum signal. Next

the inductance L4 should be adjusted for maximum signal. L2 is adjusted next in the same manner, followed by the adjustment of L1. In adjusting L1 and L2, it will be found that they tune quite broad. Next, the neutralising inductance L3 should be adjusted for maximum signal. This may be tricky if the inductance of L3 is too high. In this case, there will be a tendency to oscillate, with a large increase in signal just before oscillation starts. This condition will also cause the amplifier to have a rather narrow bandwidth. So check the bandwidth if you suspect L3 is wrong.

After the above procedure has been followed, it should be repeated and the inductances realigned if necessary.

Once the above alignment procedure has been completed, no further adjustments are necessary while operating your receiver.

OPERATING INFORMATION

To coin an old expression, "the receiver is no better than the antenna" applies equally well here. Use a good antenna, and one with the proper im-

pedance—either 52 ohms or 300 ohms unbalanced. If you do this and the pre-amplifier is properly constructed, you can expect a noise figure of 6 db and a signal gain of 18-24 db.

On-the-air tests were conducted at W2RMA's shack over a period of a month. During this time the S/N-6 was put through various tests and suffice to say it proved its value. Signals were heard which could not be detected without the S/N-6. Also, a definite improvement in signal-to-noise was noted on weak stations which could be detected without the pre-amplifier. This was to be expected, however, since any pre-amplifier, or receiver with a noise figure of 6 db is an exceptionally good one.

To those of you who build this 2 metre pre-amplifier, be sure to use good quality parts, good workmanship, and above all, follow the article faithfully and you'll enjoy lots of DX.

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6AC7	15/-	954	7/11
6B8	15/-	955	7/11
6F6	12/6	12A6	12/6
2051	22/6		
6K6G	12/6	2050, 22/6. This valve is suitable for use with Photo Cell Relay Unit, as per June, 1953, issue of "Radio and Hobbies."	
6K8	12/6		
6L7	12/6		
807	25/-		

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Type RT-34/AP5-13

Frequency Modulated, approx. 450 Mc. Valve line-up:
9—6AG5
5—6J6
2—2D21
1—VR105

COMMAND RECEIVER CONTROLS, Type BC450

3—Slow Motion Dials.
6—Single Pole Double Throw Switches.
2—2D21
1—VR105

Also contains Dynamotor, input 27v. 1.5 amp., output 285v. 60 Ma. Price £2.17/10/-

RADIO TRANSCEIVER AND INDICATOR UNIT

V.H.F. Approximately 180 Mc.

Type 1045. Valve line-up in Transceiver: 2—RL18, 1—VR135, 1—5V4, 1—EA50, 1—RL37, 6—EF50, 1—6SN7, 1—GL2050 (Thyatron, 2—VR150/30 (Voltage Regulators), 1—884 (Gas Triode). This unit also contains a motor driven Selector Switch, two superbly designed Polystyrene six-position rotary Coil Turrets, and an LF. Transformer strip ideally suitable for use with Television. Band width 10 Mc.

Indicator Unit, Type 1047, Valve line-up: 7—EF50, 1—879, 1—VR54. Also contains a 3,000 type Relay, 2,000 ohms, ten assorted Potentiometers, a two-bank Ceramic Wafer Switch, and an illuminated scale (5BP1 tube and shield not included).

These two Units are brand new, and are packed together in their original packing cases.

PRICE £21/10/- the two.

Transceiver £15/-/- if supplied separately.
Indicator Unit £7/10/-/-

COMMAND MODULATOR UNIT, Type BC456E

Containing Valves: 1 Rectifier VU111, 1 EF50, 1 10 Mc. Magnetron Valve complete with magnet, 1 Crystal Diode Type IN21; and 1 24 volt Blower Motor. Brand new. Price £5/19/6.

MODULATING UNIT

Type 169, containing Klystron Tube, three Neon Stabilisers, one EF50, two half-wave Selenium Rectifiers, one 5U4 Rectifier, one CV85, Potentiometers, gears, Resistors, high voltage Condensers and Transformer. Price £4/19/6.

BENDIX RADIO AZIMUTH CIRCLE LOOP AERIAL CONTROLS, Type MN22A

Price 35/-
Post. & Pack. 4/8. Interstate 8/-

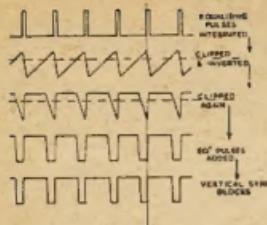


FIG 27 - VERTICAL SYNC BLOCK GENERATION

Frame Sync.

The frame sync. pulse is formed from equalising pulses, by integration and slicing, and making up the trailing edge of the slot by addition of equalising pulses.

Sync. Train Synthesis

Keying pulses, at 50 cycle rate, timed from an appropriate equalising pulse, and suitably delayed, are used for:-

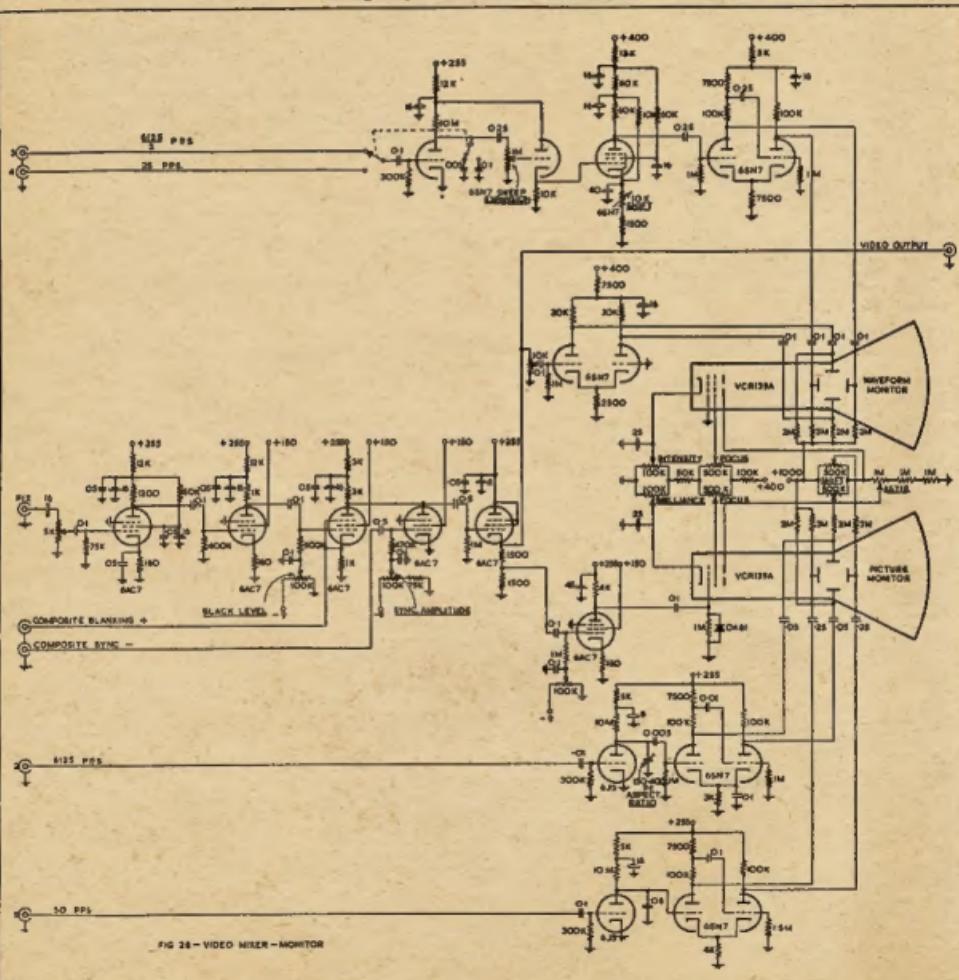
1. Keying out 7 horizontal sync. pulses.
2. Keying in 14 equalising pulses.
3. Keying in 6 vertical sync. blocks.

The composite sync. waveform is then clipped, and becomes a waveform, as in Fig. 25e, similar to the c.c.i.f. standard.

The 50 p.p.s. blanking waveform is compared with the 50 cycle mains in a discriminator, and feeds a correction signal back to the 12,250 p.p.s. master multivibrator for mains locking.

The sync. signal generator has eight outputs:-

1. Combined sync. for the video mixer.
2. Combined blanking for the video mixer.
3. 6125 p.p.s. driving pulses for the flying spot scanner.
4. 50 p.p.s. driving pulses for the flying spot scanner.
5. 6125 p.p.s. driving pulses for the picture monitor.
6. 50 p.p.s. driving pulses for the picture monitor.



7. 6125 \div 3 p.p.s. driving pulses for the waveform monitor (line).
8. 25 p.p.s. driving pulses for the waveform monitor (frame).

VIDEO MIXER-MONITOR

The video mixer was simplified, and one tube removed, together with the phase inverter. High peaking was effected by choice of cathode bypass of the first stage. This was as good as the circuit described in Part 4, but still gives over compensation at high frequencies, outside the 1 Mc. bandwidth, causing "snow."

Blanking is injected into the cathode of the third stage, and sync. into the grid of the fourth. Capacitative shunting of the cathode bias resistor of the third stage, by the blanking input cable, provides additional high peaking. Another amplifier tube was added to drive the grid of the picture monitor tube, in the monitoring section, associated with the mixer. See Fig. 28 for circuit of the combined unit.

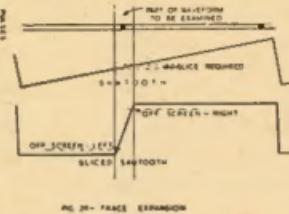
Picture and Waveform Monitor

This unit provides cathode ray tube monitoring of the transmitted picture, and of the video waveform, at 1/3 line and 1/2 field rate. Two VCR139A cathode ray tubes are used, mounted side by side. The picture monitor tube time bases are directly driven from the sync. generator. Video modulation is applied to the grid, from the mixer section, with an OA61 diode for d.c. restoration.

Horizontal deflection of the waveform monitor is obtained at 1/3 line, and 1/2 field rate, from a time base driven by

pulses from the sync. generator, with a switch for frequency selection. The video waveform is displayed vertically.

To examine the vertical sync. waveform, embracing 7 lines, considerable expansion of the horizontal trace is required, of the order of 30 to 50 screen diameters. A circuit has been devised, possibly not original, to accomplish this expansion, together with trace shift of the same order.



The circuit selects a slice of the horizontal sawtooth, and amplifies this slice. In this way, the c.r.t. spot is arrested just off screen until the selected slice of the sawtooth is reached, then travels rapidly across the screen, displaying the selected part of the complete cycle, and is arrested again just off screen, until flyback. See Fig. 29. The width of the slice, and its position can be varied. This gives "expansion" and "shift" facilities.

Using this circuit, the deflection amplifiers do not have to provide a defec-

tion voltage in excess of say 1½ screen diameters, thus ensuring a stationary spot well off screen. By altering the part of the sawtooth where the slice is taken, effective shift of the display is obtained, independently of the deflection amplifier and deflection plate mean potentials.

The circuit as shown is very satisfactory for its purpose, but if adapted for general oscillographic work, would need some further experiment, as there is considerable interaction between trace expansion and trace shift, and linearity of the part displayed is rather poor.

RECEIVER

The receiver video amplifier gain was far greater than necessary, so the first stage was removed. This changed the polarity required at the input, and enabled the phase inverter of the video mixer to be recovered also. The vertical time base frequency had to be changed, from 25 to 50 p.p.s. and this improved the vertical linearity considerably.

A worthwhile improvement in synchronism, on the new type sync. waveform was immediately apparent, and the picture remains locked, over a far wider range of signal inputs, than is permissible for an acceptable picture. Some pairing was evident, causing an apparent 122 line picture, but improvement in the vertical sync. separator has overcome this. The sync. separator now uses three 6SH7 tubes, resulting in a vertical sync. output of a short duration negative going pulse of constant amplitude and width.

(Continued on Page 9)

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and Freight with Orders

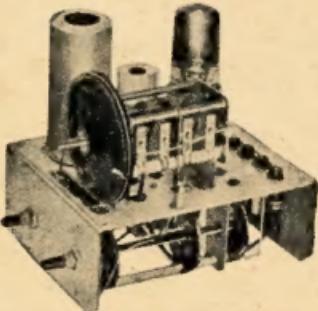
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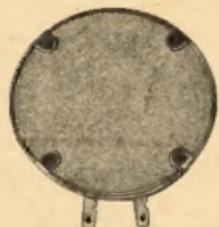
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- Small — compact — lightweight — durable.
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- Precision engineering ensures realistic reproduction and high output with long life and dependable operation.

- The only unit available with a genuine sintered metal filter.
- Good high frequency response ensures excellent speech reproduction.
- Aluminium diaphragm mechanically protected and frequency controlled by "Zephyrfil" filter.
- Australian made throughout.
- Only carefully selected cements used throughout, to suit Australian climatic conditions.

TECHNICAL DETAILS

Rochelle salt crystal microphones are perhaps the most widely used for all types of service where quality speech and music reproduction at high output levels is a requirement. They are dependable in performance and when fitted with the appropriate "Zephyrfil" filter, their frequency response may be adjusted to suit any application or requirement.

This crystal microphone requires to be terminated with a high value parallel load of the order of 1 to 5 megohms for best results.

The mass of the moving parts is small, hence the sensitivity is high and a high efficiency is achieved. Light gauge solder lugs are provided so that excessive heat in soldering will not be transmitted to the crystal element.

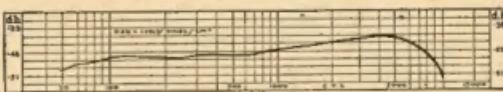
When mounted in a microphone cage, it is recommended that the insert be suspended in rubber, to eliminate shock and vibration.

One of the connecting lugs is directly connected to the case and care should be taken to solder the metal shield of the microphone cable to this solder lug, keeping the unscreened portion of the centre conductor as short as possible to eliminate hum pick-up.

All crystal elements are mounted on high grade suspension pillars being fixed thereto with a good quality cement, thus ensuring stability and long life.

Case 1 1/2" diameter (rear), 7/8" thickness, 1-13/16" overall height (front) with filter fitted.

Frequency Response = 60-4,500 c.p.s.
Output Level = -45 db (0 db = 1 volt/dyne/cm²)
Impedance = Model 1XA Grid 1 — 5 megohms.



Approximate Frequency Response Curve

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Ross A. Hull Memorial V.H.F. Contest, 1953

RULES

1. The Contest will take place in the 50-54 Mc. band and will commence at 0001 hours E.A.S.T. on 18th December, 1953, and will continue until 2359 hours E.A.S.T., 3rd January, 1954.

2. Points may only be claimed for contacts outside the competitor's own call area.

3. Only one contact with any one station per twenty-four hours commencing midnight E.A.S.T. to count as a scoring contact.

4. Exchange of a serial number will constitute a contact.

5. The serial number of five or six figures will be made up of the RS (telephony) or RST (telegraphy) reports plus three figures which may commence with any number between 001 and 100 for the first contact and which must increase in value by one for each successive contact, e.g., if the number chosen for the first contact is 050, then the number for the second contact must be 051, for the third 052, and so on. If any contestant reaches 999, then he will start again 001 and continue.

6. Scores will be calculated on a points basis as shown in the table appended.

7. Logs should contain the following information: Date, time (E.A.S.T.), call of station contacted, serial number sent, serial number received, points claimed for the contact, and at the foot of each page, total points claimed, and at the end the grand total. Logs should be

signed by the competitor, together with a declaration to the effect that the station was operated strictly in accordance with the Rules and spirit of the Contest and that the decision of the Federal Contest Committee shall be final and binding. Logs must be received by the Federal Contest Committee, Box 1734, G.P.O., Sydney, not later than the 24th February, 1954.

8. Entries will be accepted from all States of the Commonwealth and Districts of New Zealand. Check logs from other countries will be appreciated by the Contest Committee.

9. For the purposes of scoring, Northern Territory will count as a separate call area, VK9 will be considered as a

State of the Commonwealth, and VK1 (if any activity) as a separate country.

10. The decision of the Federal Contest Committee will be final and binding upon all matters pertaining to this Contest.

11. The regulations governing the control of Amateur Radio in each contestant's country must be observed.

12. Awards. The outright winner of the Contest within the Commonwealth of Australia will receive an appropriately inscribed certificate and, in addition, if a financial member of the W.I.A., will hold the Ross A. Hull Memorial Trophy for one year.

The highest scorer in each call area in Australia and New Zealand will be awarded a certificate. In addition, the Federal Contest Committee will have the right to make any additional awards.

	VK2	VK3	VK4	VK5	VK6	VK7	N.T.	VK9	ZL1	ZL2	ZL3	ZL4	Other Countries
VK2	5	4	2	10	4	6	10	7	7	7	7	7	20
VK3	5	4	6	9	10	6	11	7	7	7	7	7	20
VK4	4	4	—	5	11	7	3	7	7	8	8	8	20
VK5	—	3	4	5	—	7	5	8	10	8	8	8	20
VK6	10	9	11	7	—	10	12	14	17	17	17	17	20
VK7	4	10	7	5	10	—	7	12	7	7	7	7	20
N.T.	6	6	3	3	12	7	—	3	15	15	15	15	20
VK8	10	11	7	10	14	12	3	—	12	13	14	15	20
ZL1	7	7	7	8	17	7	15	12	4	2	3	20	
ZL2	7	7	8	8	17	7	15	13	4	—	4	3	20
ZL3	7	7	8	8	17	7	15	14	2	4	—	4	20
ZL4	7	7	8	8	17	7	15	15	3	3	4	—	20
Other Countries	20	20	20	20	20	20	20	20	20	20	20	20	—

To obtain points per contact, look down the column of your call area until you come to the line of the State contacted. The figure where the two lines intersect is the points score for that contact. For example, VK5 works VK4—points score is 5.



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FIFTY MEGACYCLES AND ABOVE

THE YALE SCHOOL OF THE WPA

The next meeting of the V.H.F. Group will be held at Science House at 7.30 p.m. on 4th December. The last meeting held on 8th November was well patronised. The lecturer for the evening was Mr. Bob Winch, the Group President. His lecture was on 'Installation of car sets'. A vote of thanks was given by Dr. Bob Black for the meeting.

as Me. This band shows signs of opening up and there should be some activity soon. 2RU and 2VW have not given up yet!

144 Mr. This hand has been fairly active this month, the highlight being the Night Riders TX Hunt held on Wednesday, November 4, at 7 p.m. till 9:30 p.m. There was a good turnout of members and guests. The hunt was a success and the 2A2Z, 2ABH, 2B1B and 2APQ, 2AWZ, SHO, 2OA, 2KS and 2AGT, 2AWP, and company had engine trouble, and 2APM. Last but not least, 2AB, 2EW and 2EX Griffiths as the hidden TX. At 8:30 p.m. John and 2ZK arrived at 8:17 p.m. and next was 2AWZ at 8:37 p.m., then the rest were directed in. There were ten car loads. A good night was had by all. The location, about the highest spot around, was Duffy's Ranch, just west of the skirt of the Forest. Supply concluded the night. We were very glad to see Dave Andrews there, mobile, but where was 2ABO?

There has been good openings to the South and EGU has been again worked from Sydney. His frequency is 144 Mc. To the North, there has also been good openings. W4DTW in Sydney has been worked from W3WZ and W3WZ and W3WZ BOA and B3ABR have both worked Newcastle for the first time. Congrats. to both. Morris JHL and John JW3 have contacted each other, using halos both ends, over 50 contacts. W3WZ has made an input to the W3WZ, W3WZ, W3WZ and W3WZ. The last of W3WZ is 144 Mc. W3WZ has started a lunch time session on 144 Mc. and gets quite a few contacts between 1 and 1:30 p.m.

The Hunter Branch of the W.L.A. had a Mid-Tex Hunt on 3rd October on 144 and 3.5 Mc. This was held at night and started at 7:30 p.m. and ended at 9:15 p.m. This is something new in Tex Hunts. [Further details appeared last issue in the Hunter Branch notes.—Ed.] —IHO.

VICTORIAN VILLAGE

The third C.D.E.N. 2 m Triangulation Test held on 16th October was quite successful. 15 stations participated. Home stations had the problem of trying to locate the six positions in each of which 224 m was the minimum transmission. Afterwards, when the positions were announced, it was apparent that many accurate bearings had been obtained. The six locations cheerfully chosen on this occasion were: St. Kilda Cemetery, Coburg Cemetery, wood Cemetery, Brighton Cemetery, St. Kilda Cemetery, Melbourne General Cemetery. Len was accompanied by XYL Phil, whom he finds indispensable as navigator. The next test will be on 16th December. It is proposed to hold the first mobile fox hunt on the second Wednesday in February.

With excellent weather conditions, the first v.h.f. field day for the season on 25th October was quite successful. Apparently activity was confined to the 2 m. band, where 3LN operated from Mt. Dandenong and 3ADU near Romsey. Both these stations also worked mobile stations in the same way. In addition, 3OAU was portable from Gembrook, including some stations in the country, were active during the day. The next field day is scheduled for 8th December.

Six metres is showing signs of increasing interstellar openings as the summer approaches. We understand that VK6DB calls and listens each evening on the 6 m band at 7.30 p.m. He is using a four el. beam and running crystal control with an 833 p.m. and the receiving set-up in a c.c. converter into a BC46. Look for him on 50.1 Mc.

Following a request by the Victorian Division Council to provide a number of lectures for the November general meeting, the V.H.F. Group did their best to put out a good show, appearing in three parts: **Herb AJO**, V.H.F. Group Chairman, gave a brief outline of activities and conditions experienced on these bands and then introduced **Max 33Q**, who spoke on crystal controlled conversion. **W.L.A. Max** still derives a lot of his information from **Ham Radio**, and is now apparently endeavouring on the v.h.f.s. to match his worthy achievements of pre-war days on the h.f. bands. Under the heading of **Amateur Radio**, he described the modifications which he had made to his AR301 to get it going on a 3 mx. Herb followed this by a brief description of the method of getting the ZBS hornring adaptor on to a 3 mx beam. **Len SLN** followed with a general outline of v.h.f. antenna and problems involved. Finally, **Len SLN** spoke on mobile work, having on view his 2 mx job consisting of a 3 tube c.c. tv super regen rx with r.f. and i.f. stages. He said that this particular unit is quite selective and has the inherent property of suppressing auto ignition interference. He gave a brief outline of the C.D.E.N. triangulation and mobile tests. Len displayed a number of items including a small antenna, a bundle of metal rods, let go at all except the centre axis, and up and sprung a complete three 3 mx beam.—SARA.

SOUTH AUSTRALIA

Albert 6ZL reports working VK4E last month on 6 m, with Ron 5MJC, in his new QTH, not far behind him. Kefish 5M7 and others stimulated into action. Brian 5CA and Ron 5NL on with the usual weekly SCA. Bill 5HD, with the sooper-dooper beams and tower, is repair-

ing the ravages of the weather in preparation for the coming season, and still doing a good job on Sunday mornings with the SWI relay. Hughie SBC also out of hibernation and has been heard down here. Austin SWO, at Laura, hopes to be on 50 Mc. soon along with Bob SBC.

Country activity seems to be on the build up and on 2 m we have Ray H. at Crystal Brook working the city with excellent strength. Clem Scott is working Brookville on 2 m and Frank Line has still got needs on 2 m. Frank and Frank Holstein had rather unusual experience with a 30 m x 10 converter using a SAK-5 in the r.f. section. The signal was very strong on 2 m and on 288 Mc. and of course the reception on 288 was well nigh impossible. The signal was tunable and the logical exploration seems to be that with such a converter the signal was being sent with its short leads was acting as a high Q tank on 288 Mc. and controlling the oscillations. You may remember a grid-dip oscillator. It was a small coil which used to loop to shunt the Lf. col to reach the r.h.t. band, to pass. Clem was right Frank.

On 288 Mc., there are good contacts to be had and plenty to learn. Don't put your change-over relay coil in the h.t. supply to the Tx

Rex SKY solved that one for Warwick 5PS. Use cathode lines and raise the heater of the twisted heater lead through the centre of the twisted (5PS) gun to avoid bypassing most of the r.f. through the heater-cathode capacity.

In the country we have Nobby SCY at Whyalla working Bob SOD at Pirie occasionally works across the gulf, with Ern SEN also getting underway on 1 rx; and with the Woombra Club SWC under the auspices of SOD, maybe we will hear some v.h.f. signals from afar! In the Mount Gambier area, SOD has been active, although they haven't worked the Mount yet, either Loftus or Gambier, but the S.E. Mems are still looking for contacts. A very active small group at Pt Lincoln!

As Xmas approaches, I wish you all, along with the XYLs and harmonics, the compliments of the season. Don't forget the Picnic on 23rd January at the Gergo Oval, Joe and his wife and daughter have made some wonderful prizes for the wives, sweethearts and children. Book the date NOW.—BXU.

HINTS AND KINKS

At a recent "Hints and Kinks" night of the Victorian Division of the W.I.A. Fred Ball, VK3YS, made a good suggestion re the use of a jeweller's fretsaw. He pointed out that the blade should be reversed so that the blade cuts on the "draw" stroke and not on the "push" stroke as an ordinary hacksaw blade. Since receiving this hint, the mortality rate of my metal fretsaw blades has gone down by 90 per cent, and also it cuts a much straighter and truer line.

CHRISTMAS

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1655-11	220-220-240	285	80	6.3V-2s; 5V-3s	34/-	957-23	30	15	60	320	500	15/-
1656-11	220-220-240-240	300	80	3 x 6.3V-2s; 5V-3s	42/9	973-2	30	20	60	270	500	15/9
1323-8K	220-220-240-240	300	120	3 x 6.3V-2s; 5V-3s	53/3	973-31	30	20	60	270	500	25/3
1356-8K	220-220-230-240	400	150	5V-3s; 2.5V-8s; 6.3V-4s	70/-	1012-1A	35	20	120	420	1000	35/2
1371-8	220-220-230-240	500-500-500	300		150/-	967-1A	35	20	120	200	1000	45/-
1400-19	200-220-230-240	565-565-525	250	2 x 6.3V-2s; 2 x 3.5V-3s; 5V-3s	110/-	956-1A	30	20	200	180	1000	57/9
1663-23	200 or 230	—	—	6.3V Tap 5V-2s (500V insul.)	17/8	1011-1A	30	15	200	180	1000	55/5
1325-34	200-230-240	—	—	2.5V-10s (1000V insul.)	47/6	1055-1A	25	20/5	20/300	80	1000	65/5
1366-32	200-220-230-240	—	—	2.5V-10s (3000V insul.)	75/-	966-1A	15	10	60	60	1000	63/5

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FEDERAL, QSL, and



DIVISIONAL NOTES

FEDERAL

Fed. President: G. Glover, VK3AG.

Fed. Secretary: G. M. Hull, VK3ES, Box 2811W, G.P.O., Melbourne.

QSL Bureau: R. E. Jones, VK3HJ, 23 Landale Street, Box 2111, Elst, Vic.

D. C. C. Manager: G. L. Morris, 80 Eighth Street, Parkdale, Vic.

NEW SOUTH WALES

President: Jim Corbin, VK2YC.

Secretary: David H. Duff, VK3EO, Box 1734, G.P.O., Sydney.

Meeting Night: Fourth Friday of each month at Assembly House, corner Gloucester and Essex Sts, Sydney.

Divisional Sub-Editor: Harry Powell, VK3AYP, 9 Russell Avenue, Wahroonga.

QSL Bureau: J. B. Corbin, VK3YC, 78 Maloney St, Earlville, Sydney (Inwards and Outwards).

Zone Correspondents: North Coast and Tablelands: Ned Hanson, VK3AH, Ryan Ave, West Kempsley, Newcastle; Hon McI. Stuard, VK3AS, 100 Durbar St, St. Georges, Cooroy; and Lakes: Harry Hawking, VK3EL, 27 Confort Ave, Cessnock, Western, W. H. Stilt, VK3GW, Cambewarra, Forbes, South Coast and Southern: Roy Raynor, VK3GZ, 43 Patti St, Yarraville, Melbourne; Dick Knock, VK3GN, 42 Yankie Ave, Warrandyte, Northern Suburbs: Harry Powell, VK3AYP, Russell Ave, Wahroonga, St. George, Chas. Coky, VK3YK, 84 Carlton Cres, Kogarah Bay.

FEDERAL

AMATEUR CALL SIGN BOOK

Progress with the preliminary work for the publication early next year of the Australian Amateur Call Sign Book—for which the W.I.A. has been granted the copyright under the terms of the public-lender—have progressed very satisfactorily.

Advertising copy is rolling in and design work is commenced on a "snappy" proposed design for the front cover—something appropriate to Ham Radio and call signs. This design will not necessarily be the one used so if you fellows have any far-out design work of half type, let me have it and I will consider your idea. It need not be exquisitely drawn so long as the idea is clear; we can have our artist tick it into professional shape. Forward your rough sketch or what have you direct to the Federal Secretary, Box 2811W, G.P.O., Melbourne, C.I.

ANOTHER HAM GOES TO HEARD ISLAND

There's no doubt about it! Despite oft heard "brass hats" criticism that Amateurs are a dying race and contribute little to scientific endeavour, the reverse is true and it still seems to be the desire that an Amateur post—in fact will find them in top positions in almost every section of the radio and electronic field. The Commonwealth over, may, have over

Yet another Ham goes to the Antarctic as an official radio operator in communications work. This time it's George Delaney, VK3ADZ. George leaves for Heard Island, somewhere about the 10th January, 1954, and will be taking his own 160w. rig with him for operation in the 7 and 14 Mc. bands on phone and c.w.

He will be looking for contacts everywhere in the world, but particularly back home in VK Australia. Give him a shout boys if you hear him on the air.

OPERATING TECHNIQUE

Currently appearing in several overseas magazines are some interesting points for general operating which would be of interest to VK Amateurs to emulate. Judging by some of the poor procedures occasionally noticed on the bands. Thank goodness the minority only come within this category.

LISTEN ON YOUR FREQUENCY FOR FIVE MINUTES before putting your station on the air. This will give you a chance to hear what sort of QSOs others may be in progress. If your frequency is thus engaged, then shift to frequency not in use. Outside of contests, this can usually be found. The result of decreased QSOs will be better joy. This goes for you, licensed in 1952; especially you licensed in 1953. AND ME!

VICTORIA

President: G. Dennis, VK3TF.

Secretary: C. Gibson, VK3EF.

Amateur Representative: Mr. G. Pickering, 160 Church Street, 191 Queen St, Melbourne. Meeting Night: First Wednesday of each month at the Radio School, Melb. Technical College.

Divisional Sub-Editor: K. E. Pincott, VK3AJF, 14 Dunscombe Ave, Ashburton, S.E.11.

QSL Bureau: Iwarwick-Graham, Roper, VK3EE, 25 Lucas St, South Caulfield, Vic. Outwards—Post Office, Box 1000, Thomas St, Hampton, S.E. Vic.

Zone Correspondents: Western: T. B. Rodda, VK3ATR, Box 254, Warracknabeal; South-Western: W. Williams, 1007 St. Kilda Road, Melbourne; E. Goolongong, VK3AN, 100 Nelson St, Warrnambool; North Eastern: A. D. Buchanan, VK3FD, "Booroorban," Warrning, Far North Western: M. Folie, VK3GZ, 101 Lemon Ave, Mildura; Eastern: Len Dwyer, VK3EF, and John Baird, North Western: C. Coss, VK3ACE, Cumming Ave, Birchip.

UNIDENTIFIED

President: J. A. Weddell, VK4APT.

Secretary: V. P. Green, VEVEX, Box 684J, G.P.O., Brisbane.

Meeting Night: First Friday in each month at the Royal Geographical Society Rooms, Ann Street, City.

Divisional Sub-Editor: J. T. Hope, VK4XL, Royal Park St, St John's Wood, Ashgrove.

QSL Bureau: Jack Files, VK4JF, Vanda St, Buranda, South Brisbane (Inwards and Outwards).

LOW PERCENTAGE B.C.I. AND T.V.I.

HERE IS THE NAME

A recent document released by the British Post Office, entitled "Radio Interference Data," brings out some rather interesting facts relating to interference to Televiewers and Broadcast Listeners by Amateur Stations. Of 47,153 cases of interference reported, only 1,000 cases due to Amateurs. Of these 1,000 instances only were complaints of T.V.I., in 426 instances only were Amateurs involved. This is an astoundingly low percentage from a source to which so much attention is paid by the public that it is granted that if an Amateur Station is in the vicinity, then it must be the cause of any kind of interference experienced. It is a credit to British Amateurs that they have kept the incidence of radio forms of interference at such a low level, it should be an inspiration and a guidance to the Australian Amateur when his time comes. It should be a directive to these responsible to let the public to something now in the obviously high percentage of other forms of electrical interference—ill we have more than a few headaches later on.

BX C.C. APPLICANTS PLEASE NOTE!

Applicants for BX C.C. and those members forwarding additional cards are requested to sort their cards into alphabetical order of Counties and not call signs.

Applicants for the same order is also required showing the following details: Country, Call, Date, Phone or C.W., Frequency.

Applications should be addressed to VK3EE, G. L. Morris, 80 Eighth St, Parkdale, S.E.11. Vic.

FEDERAL QSL BUREAU

RAY JONES, VEERJ, MANAGER

Alan VK3VY overhauled the Tx and Rx in preparation for 48 hours' solid operating during the recent "CQ" Contest. Expect that the petrol and dieselene for the power units will last a week or a few shillings, but maybe it was worth while.

VK3WZ, with QTH as Manus Island, currently heard on 14 Mc. c.w.

Bob ex-VK1RJ has at long last got rid of his radio from a lousy signal and will spend the balance of November making them out and mailing them. To rumoured that Rob ex-VK1RJ has already issued his but none sighted so far this year. Now only needs Rob ex-VK1RJ to get busy with his rig and the 1952 Macquarie bunch will be in the clear.

Treb BENSIS states that up to date he has mailed 944 reports this year and received 463 reports. A lot of work involved in making out these reports and it's pleasing to see that it is not in vain.

Can anyone advise whether WSMJH, who operated from the North Borneo region around August, 1948, is still in the land of the living and present QTH?

Lee C3RF gives QSL address as via WIWAY.

SOUTH AUSTRALIA

President: W. W. Parsons, VK3PQ.

Secretary: H. G. Harris, VK3HJ, Box 1834K, G.P.O., Adelaide. Telephone: J 1151.

Meeting Night: Second Tuesday of each month at 17 Weymouth St, Adelaide.

Divisional Sub-Editor: W. W. Parsons, VK3PQ, 18 Lonsdale Avenue, Ascot Vale, Vic.

QSL Bureau: Gee Luxton, VK3RJ, 8 Brook St, West Mitcham, South Aus. (Inwards and Outwards)

WESTERN AUSTRALIA

President: G. A. Moss, VK3GM.

Secretary: J. Mead, VK3EL, Box N103, G.P.O.

Perth: Perth, Mounts Bay Road, Perth.

Meeting Place: Perth Technical College Annex, Mounts Bay Road, Perth.

Meeting Night: Third Tuesday of the month. Details to be advised. Contact Vic.

QSL Bureau: Jim Rumble, VK3RJ, Box F119, Perth, West. Aus. (Inwards and Outwards).

TASMANIA

President: L. E. Edwards, VK3YK.

Secretary: F. J. Evans, VK3TFJ, Box 371B, G.P.O., Hobart.

Meeting Night: First Wednesday of each month at the W.I.A. Club Room, 147 Liverpool Street, Hobart.

Divisional Sub-Editor: L. E. Edwards, VK3YK, 6 Third St, New Town, Outwards—Ray Calvert, VK3RC, 210 Gloucester St, Hobart.

Three Correspondents: Northern: M. Chapman, VK3ICA, 56 Merriwilly Rd, Launceston; North Western: R. K. Wilson, 11 Cunningham St, Burnie, Tasmania.

NEW SOUTH WALES

The October meeting of the N.S.W. Division was held in fine weather and 62 members were present to hear Mr. George Riley, of the Wireless Association, speak on the subject of the problem of B.C.I. and the Advisory Committee. Mr. Riley was deputising for Mr. T. E. Armstrong who had been unexpectedly called away to the country. Mr. Riley gave a very concise summary of the three subjects—radio, the life of the Amateur, Mr. Riley spent the rest of nearly two hours answering the queries of the assembled Amateurs. At the end of that time a very enthusiastic vote of thanks was given to him after being moved by Mr. Caldwell, C.I.D.A.

As our lecture, Vaughan Wilson demonstrated the effects of ionisation when transistors are connected in common collector, operating at very near the maximum working voltage. This illustrated a point of a previous lecture by Mr. Leo Medina, of the C.I.D.R.O.

The meeting ended at 10.30 p.m. with the existing "up" and "down" signals being worked out on the footpath as usual, and so it was obvious that a good time was had by all.

The First South Western Zone Convention was held at Wagga on 1st November. It was a good meeting and the Convention was a success. This is due to the organisers: Jim ZAO, Zone Officer, Coolamon; Alf 2BW and Stan 2AD, of Wagga; Stewart 2PL, Griffith, Ross 2PN, Tumut, and Don 2RS, of Albury. A full report appears elsewhere in this issue.

NORTHERN SUBURBS ZONE

My apologies, fellows, for missing out with last month's column, but with work on the bands much in that time, I could gather little news. Alan 2FH has been busy re-building the rig and experimenting with a WBJK beam on 20 and 40 m. It seems work is done that I can't bring him back. QSL 2FH, Box 1004, Burwood Radio Club is at present going through the procedure of obtaining a call sign. A rig for 20 and 40 m is owned by the Club and needs only an antenna. The club holds general meetings every second Tuesday night. For information, ring L2 5534 (week days) and ask for Barry. —SAVC

WESTERN SUBURBS

Activity is at a low at present owing to the poor conditions. Aub 2AFY, of Auburn, is on 21 Mc. and has a beam with telescopic elements for 20 and 40 m. The club holds general meetings every second Tuesday night. For information, ring L2 5534 (week days) and ask for Barry.

CIVIL DEFENCE EMERGENCY NETWORK

Operation 5th Nov. 1953. Mafra-Hayfield Area
The Eastern Zone Emergency Network was called into service by the Mafra Police when a lot of young men wandered off into the bush after being chased by a truck accident near Tumbarumba West. Keith Scott, VK5SS, equipped with a Type 3 Mark II set out in his panel van, maintained communications with David Scott, VK5MF, at Mafra. The area was then later shifted to Hayfield where a report had been sent in that a chap answering the description of the lost lad had been seen. VK5SS had a p.a. system mounted under the bonnet of the van to be heard on the air throughout the search. The use of the p.a. system was found to be worthwhile in organising search parties and in recalling names when the search was abandoned at midnight. The lost lad was found in his sister's home at 5 a.m. on the Saturday, with no clues as to where he had been.

EASTERN ZONE CONVENTION

The Zone Convention was held at Omeo during the first week in November. The meeting was certainly held by all. All the arranging for the Convention was done by Bill SWE and he is to be congratulated on the job that he did. I feel quite sure that this Convention will live on in the memory of many, particularly those who came to room 26 after the meeting, although Keith 355 claims it will live longer within the memory of those who tried to sleep within room 26.

After 26 March, together with a good sprinkling of XYLs attended, the only visitor to the Zone being Keith 3HK. The first event was the Zone Dinner and it was certainly one to remember. The chairman, Ossie JAHK, proposed the Royal Australian Legion, 3000, to the Zone to the Wireless Institute, to which Ron NPF responded. Graham JQZ proposed the toast to the Zone and Keith 3HK responded. The meeting was held at the home of Bill 3WJ, and after the Zone S.A.H. had thanked everybody for their presence, he proceeded to give a lengthy report on the year's activities. He pointed out that the zone hook-ups had been somewhat and a very big improvement was made in the last year. His report, pointed out that finances were quite satisfactory although the W.L.A. re-imbursement was not yet forthcoming. The meeting moved a vote of congratulation to the Zone for the acquisition of the Kinnear Trophy. The election of office-bearers then took place and resulted as follows: President, Lindsay 3IO; Vice-Presidents, Rex JVL and Alf MacKrell; Secretary, David 3DY with Keith 3SS as Assistant; Graham 3JW as treasurer; and David 3WJ as Vice-Chairman of the Zone. Stan Lee 3SG will again do the notes. Ron 3PR takes over as Control Station, and Keith 355 is Emergency Network Liaison Station.

In the absence of Lindsay and Mrs. Alf MacKrell took charge of the things moving at the start rate. It was decided to prem at the State Convention for the transfer of the National Field Day from the holiday weekend as this time is quite unsuitable to many. The Zone members will try to run a Field Day in conjunction with it.

The meeting also decided that its representatives at the State Convention should move for the alteration of the time of operation for the R.D. Contest as the present time was considered quite unsatisfactory. The time proposed for the inclusion of E.L.S. in the Contest. The Zone representatives at the State Convention will also have some suggestions to make regarding the Sunday morning broadcast and will make some arrangement for the recording of W.L.A. news. The meeting closed at midnight and the ladies served a delightful supper.

On Sunday the party set out at 10.30 and did a tour of the local beauty spots, including a lookout point some 3000 ft. above sea level. The party then stopped up at Hannanuppa Bridge for a picnic lunch and Keith displayed his ability as barbecue expert. As most of those present had to travel quite a long way, the party broke up at 3.30 p.m. The meeting closed at 3.30 after which must surely have been one of the most successful Conventions ever.

NORTH EASTERN ZONE

Saln, Alan Taylor, at Mangalore, is a Ham we don't hear of as much as we would like to, and while on the subject of Mangalore, we must congratulate Alan 3SQ, who has been promoted to a job at Melbourne Airport, also Doug 3ZL, who has been promoted to the same place at Mangalore. Incidentally, Doug and his XYL are receiving congratulations on the addition of a son to their family. Although we must always share good news, we would like to add a note of congratulations to Chas 3ACW, but he has been handed another secretarial position in a local organisation.

Murray SHZ was in good form when the Shepparton bowls' season opened this year with the XYL bowling the first ball for that club. Henry SHZ thinks that VK4 could do a lot more in the way of fishing however, it is from Peter's interest in Radio that we learn that the Shepparton group that would mean this time, probably, JAPF 3HZ, 3AJV and 3ALC are all relatively new & VK4 and 3ALC have been here of late. But Keith SHZ had quite a list of high-class DX in his log the other day. Hugh 3AHP thinks Ken will have to have another word soon he has not worked all the stations in the zone. Garry 3AU is recovering the 20 m. band. Frank 3ZU must be recovering from that good effort in the R.D. Contest. Vic 3AKX must be like Jack 3PF, as we have not heard the place he has been for nearly 6 months, though Vic is seen from time to time in Ballarat.

Howard has been airing 3AJV a bit during October but Jim 3LW was away somewhere as last advice. Jim 3WQ is working on construction projects and although he is not SUT was on the last hook-up. Vic is getting some time "on the air". Sut 3CI is mainly on V.H.F. work, but Den 3CO and Stan 3AGT have not been heard advertising their presence. We are hoping to have quite a bit on the State Convention in the January issue.

CENTRAL WESTERN ZONE

This month's news starts on a not too cheerful note. Charlie 3IB/AC is leaving VK3 early in December for the U.S. and we hope to see Macquarie 3KX. Garry the things some change do to dodge our summer. To wish him well and a farewell evening was arranged at JAPF's 3HZ. Jim 3LW and Alf 3AKX attended. At the close of the evening a presentation was made by President JTA on behalf of the Zone. Chas is taking along his stand-by rig so watch out chaps and don't be surprised if you see him. I have heard news of what's going on Macquarie. Sorry but at the moment I can't give you his VK1 call.

In last month's excitement over the Convention, one very important item was overlooked in the many notes. Our congratulations go to SUT 3AKX and his wife. The boy, Dick 3AU is now up and about again after his illness and Herb 3IN is likewise, but has to take things very steady for at least a month. Jim 3DP is now recovering his newly acquired SUT 3LW. So there is good news. A new sign committee from Deep Lead. John 3AKR looks like just completing his rig in time to pack it all up again as he's off to Frankston after Xmas. It's been a busy month.

No doubt the present atrocious conditions on 80 m. will have changed for the good by the time this appears in print, so what say fellas for a really good roll up next Wednesday evening at 1800 hours. All the very best any how chaps for a Merry Xmas and best of DX.

GEELONG AMATEUR RADIO CLUB

At the meeting on 18 October business items included a letter from the W.L.A. requesting that the representatives of the Club attend the W.L.A. meeting on 12th October. It was arranged that four members—SUT, JAPF, 3WT and M. Stock—would make the trip. Final arrangements for the Tx Hunt on 10th November were made and SUT was to be in charge of the gear. The committee was to talk on Miller Effect and its implications by J. Mitchell.

At the meeting on the 21st, the report on the visit to the W.L.A. meeting was presented by Ed Kressel and was received with satisfaction. Congratulations were conveyed to Geoff Wood on the successful launching of his boat. It was decided to get the Class C Wavemeter in running order, so we have to thank SUT for the work done in this direction. The syllabus item was a source of surplus gear.

BALLARAT & DISTRICT RADIO SOCIETY
The November meeting was an organised Shout. After the usual formalities the meeting had been completed, all the members were taken on a tour of the various shacks including that of Bill 3AMH, Bert 3VJ and Eric 3ZL, where the boys were able to see the gear in action and everyone voted it a very enjoyable evening.

The October meeting included a very interesting lecture by Brian Stares, of the R.A.A.F., on "The Theory and Construction of Antennas and Feeder Systems". The technique used on design and construction of u.h.f. vertical and beams being very tidy and clearly explained, Brian produced a beautiful set of graphs to illustrate the different points of his lecture and helped clear up any doubts regarding antenna impediment. In regard to his talk on the like problems, his actual working models of u.h.f. multi element beams were extremely well constructed and were studied very closely.

The Ballarat & District Radio Society now has the call sign 3AMQ allotted and within a few weeks should be active under the supervision of Keith JIV.

QUEENSLAND

October seems to have been a month of contests. With the number of signals emanating from VK4, the boys here must have "congestion" by this. To those I've spoken to since, all enjoyed the scrambles. Keith 4KS seemed to have his usual high score in the VK-ZL contest. Jim 4LW and Alf 4MC were also quite good, Alf 4MC also had good scores. Clive 4CC must have looked at his clock upside down as with only a few minutes to go, was heard to say he had two hours to make up more. Bill 4TA and his XYL were away as the QRM was too thick and heavy for him.

October also saw Tom Athey take over the job as Secretary from Jim 4OM who has to do his National Service Training. At our October general meeting a vote of thanks was given to Jim for his work as Secretary and Station Manager. Did see a few old faces amongst those present at the meeting. Those I can call mind were Alf 4VS, and 4CF. I hope to see you all again. I must say that the 40 m. band is still excellent for very fine lecture on Trans-Way Radio as applied to the essential services in and around Brisbane, and the bearing overseas trends have on it. The forecast would be for another month of contests. I would like to say that it was very interesting.

The Institute, this Division and Contests received some fine publicity in the local papers during the month, which should have dispelled the opinions of all and sundry that the Ham is not a social organisation. Of course, like the fellow VKS from the b.b.s. who, rumour has it, is thinking of the chairmanship of SWC. If correct, I would advise him to read Chis Sales masterpiece, "The Special". I read it from cover to cover, and it is a most excellent book. I would like to say that after all "Panzy", S. would take some occupying.

We have lost our Class Manager, Ray 4LJ, who sneaked away early one morning for Darwin. He hopes to hear us with his VK3 call sign. And Council was you right. Paul 4LJ and his wife presented us Class Manager do as well. Keith 4KS is enjoying a few month's temporary transfer to VK3. Jim 4TA is back on deck again, pleased to see the effects of the new modulator on his receiver. Alf 4MC who contacted me during the testing of the new modulator for the advice, checks and criticisms, etc. and to those curious ones I haven't lost my love of c.w., but have to get away from it. I am now using a 10 m. band in Town Head Vince 4V2 on c.w. first time in years or was it a pirate Vince? John 4FT has been trying out a beam. Clive 4CC is also playing around with modifications to his beam. Don't know if he has got his new 10 m. beam suits to W-Land. Arthur 4FZ has just returned from a few weeks' vacation down the Lookout, while I enjoyed my vacation clapping a paint brush in one hand and more tightly the rubber band in the other.

Had a few visits and QSOs with Murray MacGregor while on holidays. Student members please note. Murray is one of the old students who went south, took Murray with him. Now he has a brand new first commercial's ticket plus a class sign 3AKX and hopes shortly to operate M/M. To his old friends, he wishes them luck and hopes to see them on the air.

Had a QSO with Frank 3FN, he hopes to be down in the next few weeks. I am sure he will be in the gang at a "Xmas Do". He won't be down in time for our December meeting, much to his disappointment. Jack 4WV was heard in Brisbane with a few of the locals. Harold 4HO re-arranged his sailing schedule, as he was getting too old for bigger and better gear now. Leon 4FW was heard getting amongst them during the Contests, also Jack 4SF, who has ideas on a new beam and some modifications to his receiver. Alf 4MC has finally got around to putting up the tower to put the beam on.

In Congratulations to John 4FT as top scorer in the QSOs for the R.D. Contest. Also congratulations to Alf 4MC, who could muster twenty or so more words we would be able to carry off this trophy. What a little effort next year fellow? Frank 4ZM informs us he has the gen on modifying a 32 m. beam get in touch with him. The 32 m. beam is out at less than 10 db signal to noise.

Hope to see you at the Xmas Party, and your regular attendance at the general meetings for a stronger and more virile Division.

SOUTH AUSTRALIA

The monthly general meeting of the VK5 Division for October was held at the club rooms to a slightly smaller number of members than usual, and the guest speaker was Mr. Bruce Masco, B.Sc., who is the Meteorological Officer at the Commonwealth Bureau on West Terrace. The title of his talk was "Some Aspects of Ionospheric and V.H.F. Propagation", and this imposing title may have been the cause of the smaller gathering, but if so, then those who

decided to give it a miss were decidedly bad judges, because the talk was enjoyed by all, even by those whose interest in the v.h.f.s. is only slight. Mr. Mason discussed the many transmitters he has in all the ranges of the v.h.f.s. in such a simple manner as to make it decidedly interesting to all members present. The intelligent type of question asked by members brought a hearty laugh of the talk, together with the genuine applause that greeted the vote of thanks proposed by Gordon, S2XU was sufficient indication of the success of the efforts of Mr. Mason. This lecture was taken as the last lesson in the v.h.f.s. receiving experiment and turned out a success so I am informed. When it has been edited it will be sent out to country members together with an explanatory paper describing the receiving part of the experiment and it is hoped that this experiment will be worth while repeating as often as possible, although this is entirely up to the country member.

The only important general business that was discussed was the length of time that the ability of the Government Tourist Bureau sending us another issue of QSL cards this year. The President advised members that Jim, SFO had seen the Director of the Tourist Bureau and while this gave him no definite answer himself at that moment, he was optimistic as to the ultimate outcome. The master of the Xmas Social and the Picnic in the New Year was also discussed and now all that remains is for the members of the Wrightington and both functions should be a huge success.

Among the welcome visitors were Messrs. L. Elphick, K. Kelsay, L. Gabb, and Claude, S2CH from Mount Gambier. To these gentlemen we say "please do see us again and come again." The meeting ended at 10.30 p.m. officially, but the lights were not put out until after 11 p.m., which tells its own story.

SOUTH EAST AREAS

57W has returned from his holidays but as yet Tom has not found much time for radio, this is as a hobby I mean. S2CH also is not very active since he returned from his short visit to the city. He is decidedly busy around the house and is a good son but not often up at times and Stewart is still chasing those elusive new countries. 5KU has had a few contacts on 20 and 40 mhz, although Erg is not altogether satisfied with the results of the new beam as compared with those enjoyed by S2CH.

The two Johns, 5FD and 5JA are still in the land of the missing. S2J has been keeping the usual skeds and the rest of Colin's spare time has been taken up with preparing the general site for our meeting for the coming summer. Associate member Jack Fowler's eye is improving rapidly and he has also been busy on the E.F.S. gear.

It is the usual practice at this time of the year to call members attention to the coming Xmas Get-Together, which is only another way of describing the December general meeting. You all know the idea by now, bring enough food for yourself, place it on the big table, and have a good time. The same applies to the food, last year we took what was left over around to one of the orphan homes, but don't let that fact cause you to have any sponge castes or elsewhere take out of your parcel this year because I have sharpened up my appetite during the year, and probably will have some mates in this regard. The liquid refreshment side of the evening will be taken care of by Council, as will be the entertainment and the like. I can say is you enjoy last year's Social, so come along again this year and repeat the dose.

Regarding the Picnic at the Gorge Recreation ground on January 23, 1954, all that I can say is that it is planned to be a success. S2XU and the Harmonics, although the OM's will be catered for with tennis, swimming, cricket, and several contests not usually associated with Amateur Radio. I have been given to understand that the OM's will be the judges between the s.w. boys and the phone boys. Book for the bus early and don't forget to bring the family. This is your day, make it a day to be remembered by all.

FOOTNOTE AREA

Some months ago I received a little booklet from the Rev. Gutheber, VK5OD, which claimed to be the official organ of the Port Pirie Amateur Radio Society. I had the booklet as a means of getting some news for the magazine, but after reading the entire contents several times, I decided to wait for another edition, because possibly it was not that was peculiar. Having read the first edition, then the next I planned the major in the hands of Council in an endeavour to find a way out of an embarrassing situation. All members of Council read "Wogs," as this peculiar booklet is titled, and were unanimous in their opinion

that it was impossible to even understand a word of it, let alone secure any items of news material for the magazine. I will therefore decide that with the editor, the Rev. Gutheber, succeeded in writing something which could be understood, then it could be printed.

After a long and patient wait, and acting upon the suggestion of the V.E.S. Council I am happy to quote from Volume Six—October 1953—which reached me on 21st October, the following: I quote: "The editor, moved by compassion, refers to an item contained in the last minutes of a recent meeting when it was mentioned that he had not received a copy of 'Amateur Radio' for some time. ISEN requires same for the technical articles and other matter relevant to Amateur Radio, contained therein, than he has anything else available. If he would like to add to the above to see some mention of the activities of the Port Pirie gang, then it would be advisable for him to forget the whole thing and not worry about it. If you desire to read about unadulterated Gipsy trips, you can do so by all means. You will read all about the 'big shots' in the game, including the very tiring reiterations of human 'bebees' between Doc and the Rev. Gutheber, and the like, and the importance in the latest issue 'Very Little Business was transacted' [This refers to the last general meeting Ed.] As a contribution to the Women's Magazine of Page Paper, one could give the same sort of notes but it is up to you to represent the activities of Amateur Radio in South Australia, then it is the most blatant form of baldredash exposed to human vision and deserves retribution to that place where human activity." Unquote.

Ignoring the mis-spelt words, and a lack of necessary punctuation marks, something of the above may be of interest to us. I ignore the criticism of the Rev. Gutheber, or shall I call him "Guthy," because I have always maintained that if one is to be criticized, then it should be by a person who is a recognized expert in the field. The Rev. Gutheber is a "Wog," who is more fitted than "Guthy" to pass an authoritative opinion on "sheer unadulterated trips" and "blatant form of baldredash exposed to human vision." Not withstanding the standard of rudeness as practised by "Guthy," but rather working on the principle, familiar to him I know, of turning the other cheek, and that the meek shall inherit the earth, I thank "Guthy" for at long last giving me something to write about

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the Port Pirie boys, although I would have preferred that it could have been of their activities rather than of a pestilent outburst from a friend calling the "big book" I have been informed from an authoritative source that "Guthy" will be leaving for America in the near future and I take this opportunity to pass on the tip up to QST and QCR to pull up their socks. I may find myself in the middle of the muddle of failure so crudely invested in me by one who should incidentally be looking for the jolly old mate in the optic. It is with grave doubts that I allow the foregoing to be published and as far as I am concerned no further comment will be allowed. Editor.

A visitor to Adelaide recently was Roth Jones 3BG, well known radio identity and journalist, who was covering the atomic explosion. He made his headquarters at the 3BG. Roth was kind to the boys and on his return to VK5 thanking all for their co-operation. Joe SJO tells me that he intends to take up several roosters to the picnic and prizes will be offered in various sections to the lucky ones who can claim the title of "Picnic King". "Picnic will be the rooster! I am entering the weight for age section, but I somewhat suspect that they are naming roosters and Joe is not running any risks.

The year has been a sad one for me. "Guthy" dealt me a blow on the solar plexus with his criticism, Ray 3RJ clipped me on the jaw with "Sobriquet" and "Live Barber", and then there was I was down and out of sight. The whole scribe for VK5 dealt me a mortal blow by not mentioning me in the notes for 285 Mc. However the scribe for VK6 helped me to my feet with his help and I am back. I will not say all the time that he means me well when he said, "A wide-awake Amateur delegate to the next world convention would be money well spent!" Thangs OM, I could do with the trip.

No further results are to hand regarding the matter of the VK5 Council. I have heard last month, but I have it on good authority that rude gestures are being made by the members of both families whenever they see the A.O.C.P. certificates of the two competitions framed in their respective homes.

I think that I am beginning to lose my grip on the members of the VK5 Council, for believe it or not, Regg 5RR, the genial Secretary of the VK5 Division, was distinctly heard to utter a swear word at the last meeting of the true Amateur radio representative, Jim Paris' fought tooth and nail at the Council meeting for the privilege of removing the brass plate of the VK5 Division for alterations. Despite protestations from disappointed members, the President stood out for Jim.

UPPER MURRAY AREAS

The monthly meeting of the Upper Murray boys was held at the QTH of Alec 5XO and good attendance was noted. The only absentees were Hugh 5BC and associate member Wolfgang, both of whom were detained at work. The highlight of the meeting was the demonstration by the head of his gear, 25' waves to a pipe modelled on 3 Mc. It was decided that the next meeting would be held at Benarkin and would take the form of a ladies' night, each member coming along would bring his XYL and family. If any member had Radio 5YL or domestic tabs, the evening closed in the normal manner, although the amount of "goodies" that some of those present managed to put away was above normal, much to the pleasure of the hostess. The meeting was then adjourned with the boys' reaction to her hospitality. Mrs. Kelly now knows that a lot of talking always leaves an empty void! That's why I am always hungry! Council members, XYLs and 5YLs, No bastards!

VKA has been bodydriving in the city. 5CP is still not on the air yet, and as the slider is still hors-de-combat, Murray is not even up in the air either. 5RE has been away in VK3, although I am led to believe that Murray has not done any work on the radio. The VK5 Division, STL, together with SMA, reports that a "visitor" from the city has advised them to fit some form of protective screening around their power supply to prevent any possible accident, caused by the h.t. Telco, by considering putting up chicken wire and running a few fowls in and around the transformers, but is a little dubious as to the reactions of the "visitors". The VK5 was particularly pleased to have a visit from the "visitor" because he was able to assist Harry to dispose of a lot of QRM from a power leak source. With all respect to the "visitor", the VK5 is a little bit of a pain in the one man's back. In another of Telco's pranks or something, Ray 5DA was a welcome visitor, no not that sort of "visitor", to some of the shacks in this area whilst on his way to VK3. As mentioned last month, he contacted Ted 5JE from the shack of STL. Ted is at the broadcast station at Woomera.

NORTHERN AREAS

The Northern Network, after a long period of inactivity, has resumed operation once again. The band now in use is 80 mcs, and the time is now 10.30 a.m. Sundays, and also the stations have been somewhat erratic at times, the following stations have been heard at good strength on the Network: 5CY, 5TL, 5MA, 5TJ, 5RL, 5CE, 5BG, 5WO and 5RI. 5SE has been heard on 80 mcs, and 5CO has been found to build up a rig for 238 Mc. and also to contact a little 20 mcs DX. 5CO has really been doing things in style, what with an XYL and a brand new house. 5KX is in the throes of rxing 5TJ, and 5TJ has been heard on 80 mcs with light at the end of the road. 5BG is often to be heard on 80 mcs during the evenings, and Bob seems to be the only station up there who has contacted SWC at Woomera. 5CE still remains the one that has had the most success with the results. 5MC was on 80 mcs recently with f.b. sig from his Type A with 9 watts input.

5CY is active on the v.h.f.s. 5VM has not been heard on any band for a long time, QRL with work. 5TJ is putting out a good signal on 80 mcs, and 5TJ and 5TJ at last mastered the interference caused by the generators. What about passing on the hint to the magazine 5TJ! 5RI, whose QTH is at Mt. Bryan, is a new addition to the ranks of 5CE. 5RL, 5MC and 5BG have put out good signals on 80 mcs. Bob is also active at present on 40 and 20 mcs. 5WO has a new three el. beam for 30 mcs, 45 ft. high and is more than pleased with it.

Don't forget about the tape recorded lectures gang, contact Reg 5RZ or Gordon 5XW, and you will be welcome to come along and all will be happy. Don't forget the Picnic and also the Xmas Get-Together. You will be more than welcome.

WESTERN AUSTRALIA

Firstly a reference to last month's notes. At the last general meeting 5NC, Neil Craigie, gave talk on Taxman's handbook equipment. As will be seen in description of the set up in use, he had car equipment available, with its covering removed for closer inspection. A very interesting hour was spent and the u.h.f. gang were particularly interested in the use of the set in practical application. Some systems to obviate interference use fm, and it seems that an effective noise limiter that does work with a.m. achieves the same object. A description of the set up in use in the car followed, and an interesting point was that only a carrier coming on of a strength capable of communication would bring the rx into action. A walkie-talkie was also shown, and the author had a very good one, which was good for Neil's efforts. A brief outline of the lecture was transmitted via 5W1 on the Sunday news and was appreciated by country members. The lecture for next meeting is to be given by Rollie 5BO on 5TJ, and I am sure, with his experience, it will no doubt be of much interest.

Further to the advice in last month's issue on the efforts of VK5 Amateur bodies to prevent a Bill going through State Parliament to enable the Perth City Council to levy a tax on all forms of property on the value of one foot, we are pleased to state that the Bill was disallowed. Many members (in spite of the fact that a spokesman for the Council said it applied to commercial property only) were of the opinion that the disallowance now gives them a great opportunity to state exactly what they mean. Most wedges have thin edges so that the result of the VK5 Council's and the rest of the figures it seems that an increase in the number of logs submitted was a deciding factor. The average score of all Divisions does not differ by a great deal, although the VK5 average was down apparently due to the weather, leeway was made up by the increase in logs.

Two members, 5TK and 5LC, threatened shortly to break into 6 mcs, re-building of beams must be in hand for 6 mcs and 5LC and 5TK will be after a couple of years at Manjimup, is now at Carnamah and anticipates being on the air again. Bill 5DX has been on a visit to Norseman, the QTH of 5TK.

The monthly general meeting will take the form of a social gathering. A good get-together when the blackboard is given a rest furthers that friendly atmosphere that is very apparent within VK5. Institute circles.

For the annual citizen band country coverage by 5WI it is still necessary to use the two additional bands of 3.5 and 144 Mc.

The gentlemen's agreement to allot the first 5 Mc. to VK5, as per the original proposal, could be modified. Seeing that the limit now is 7150 Kc, it leaves only 190 Kc. for phone and after the commercials (mainly Asiatic stations) have had their share there is barely 15 Kc. of blank spots available. A better proportion might be 50 Kc. for c.w. and the rest (?) for phone.

TASMANIA

The November meeting was held as usual in the Club Rooms on the first Wednesday of the month. The attendance was rather good and should get even better as summer gets under way. The lecture for the evening was given by "Doc" Keith 7LL, on the subject of "Electro-encephalograms", which is apparently a device for recording brain oscillations. Doc made this highly complicated device sound quite simple and illustrated with several hundred years of brain wave recordings. A vote of thanks was moved by TIVY and carried with acclamation.

A visitor to the meeting was Arch 5KK, who is getting to be quite a regular visitor to VK1. Arch and 5XL are spending a spot of leave and so have been regulars on the "Things and Looking Up" on 7 Mc. at broadcast time on Sundays. Recently the following responded to TWI's call to locals: 5OM, TIVY, TMY, TSD, 7RM, 7MK and 7LX, and then TWA at Burnie come along. So the 5XL gang also in the background at Gretna, so it seems you do have some listeners sometimes Tom.

Recently paid a visit to Flinders Island and had a solid three days research with EPB. Bill 5TJ is putting out a good signal on 80 mcs and 5TJ and 5TJ at last mastered the interference caused by the generators. The main topic of conversation was, of course, the lack of s.c.m. mains which means that accumulators and vibrators, etc. are necessary. Some interesting pieces of equipment and samples found locally, including several pieces of tourmaline. Unfortunately, there was no time to go climbing the quartz mountains, so I came away empty handed.

A visitor to Hobart recently was Leon 5TP, of Devonport. Leon is very interested in single-sideband and has a rig almost complete. He tells me things are rather quiet in Devonport and Doug 5AB has been urging him to build a 144 Mc. rig so that he will have somebody to talk to.

I spent a very pleasant evening at a Launceston zone meeting recently and enjoyed meeting some of the boys I knew well enough by name, but had never met before, a flourishing zone, this Northern Zone. A regular Sunday evening meeting is held at the hall on the corner of the frequency being 3572 Kc. So if Sunday evenings bore you, fire up the rig and join in.

The TWI Tx for the coming Exhibition is now well under way with donations coming thick and fast. The original design has been modified in favour of a more compact rig destined by 5BZ. A circular showing specific parts needed will be out by the time this reaches print, so do the right thing boys! I accused Tiny 7JD of lying low during the last few weeks and got a very well and truly rebuked back. It seems Tiny works nothing else but 21 Mc. and says there is quite a bit of activity if I would like to listen sometimes. Saw a perfect example of a four-wheeled trailer being towed by a 5TJ. Bill's rig is apparently completely foot controlled, including the key. Never thought I'd live to see the day! By the way, in last month's notes, read TML for TMY—my apologies Alan, I was referring to Max.

NORTHERN TASMANIAN ZONE

In recent weeks there has been a spate of 144 Mc. activity in Launceston, brought about by one of our members receiving his SWC 144 Mc. badge placed on his QSL card. Only in Australia and this led to the idea of conducting a 2 m field day as a change from DX hunting. 7LX and 7KX were given the task of operating 7LX and 7KX, but soon got into great trouble with them. When they hit in the November issue of "A.R." the beautifully lucid description by the VK3 knight of the pen of the difficulties of successfully hiding a Tx 7BQ and Percy Crawford's much simpler, but equally mentioned Rx's, were cited. 7KX's record in field day contests appeared to be in danger in view of the intense competition although local books record that TIP with a complete Tx and Rx in his auto, was edging into place as hot favourite.

On the 7 Mc. band 7BZ has been upholding some honour, whilst 7LX has been working some good DX as has been noted. Recent members have been 5CAB and 5CAB's wife, and 7BZ who came along to our last meeting and heard a lot about the ambiguity of rules in the R.D. Contest. As 7CA has been slowly recovering from the ordeal of a new daughter, 7KX was present to help for the truth or otherwise of these notes.

NORTH WESTERN ZONE

NUMBER of whale seals are almost complete as are two 5AL, who has constructed a 20 m beam has been an experienced and some difficulty in keeping the elements from sagging, but no doubt you will overcome the trouble

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Ken. TWA has a fine piece of workmanship in a 15 mx beam which is all complete except for a motor to drive it and believe that DX has never been so good at TWA. QSL before TDX has recently been great deal in constructing a new type of beam which is switched instead of rotated, but when the final tests were made the whole thing was a disappointment as the best results were obtained with the dipole alone, and as directors and reflectors were added the signal just faded out. The monthly meeting was held at the home of yours truly (R. Wilson) where there was a good turn up and members and I had a talk on radio as applied to the last war. Supper was provided and everyone seemed to enjoy themselves.

CORRESPONDENCE

Editor "A.R." Dear Sir,

Your Editorial in October "Amateur Radio" states that the Amateur is generally categorized as a radio maniac or wireless crank. If we could find the reason it would be easy to make the correction.

Mr. F. P. J. judges the Radio Amateur in two ways. First he hears him on the air and secondly he observes a neighbour who is an Amateur.

In listening to an Amateur transmission he most often hears a lot of queer jargon meaningless to him—because abbreviation introduced for speeding up Morse transmissions are used in speech when often it would be quicker to use plain words (for example, XYL, which is used to mean wife) and often in some cases he hears continual repetition and humour which, although probably appreciated at the other end of the contact, sounds puerile to him.

The neighbour he observes is often an Amateur who spends as much as 90 per cent of his leisure time on his hobby. He hears via local gossip of the excessive time devoted by the Amateur to his hobby and is often critical on the Air and often notes the lack of other normal activities, such as gardening and sport by the Amateur.

Amateur Radio is a most absorbing hobby, so absorbing that it can easily become an obsession and in my opinion it is the Amateurs who have become obsessed with their hobby who have brought into use the terms "radio maniac" and "wireless crank."

—QSD."

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